

RAW SEQUENCE LISTING

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Application Serial Number: 10/539/107
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PCT

RAW SEQUENCE LISTING

DATE: 06/27/2005

PATENT APPLICATION: US/10/539,107

TIME: 13:46:09

Input Set : A:\non-provisional sequence listing.ST25.txt

Output Set: N:\CRF4\06272005\J539107.raw

3 <110> APPLICANT: Heyduk, Tomasz
 4 Heyduk, Ewa
 5 Knoll, Eric
 7 <120> TITLE OF INVENTION: Biosensors for Detecting Macromolecules and Other Analytes
 9 <130> FILE REFERENCE: 048483-102364
 C--> 11 <140> CURRENT APPLICATION NUMBER: US/10/539,107
 C--> 11 <141> CURRENT FILING DATE: 2005-06-15
 11 <150> PRIOR APPLICATION NUMBER: PCT/US04/041315
 12 <151> PRIOR FILING DATE: 2004-12-11
 14 <150> PRIOR APPLICATION NUMBER: US 60/529,076
 15 <151> PRIOR FILING DATE: 2003-12-12
 17 <160> NUMBER OF SEQ ID NOS: 126
 19 <170> SOFTWARE: PatentIn version 3.3
 21 <210> SEQ ID NO: 1
 22 <211> LENGTH: 29
 23 <212> TYPE: DNA
 24 <213> ORGANISM: Artificial
 26 <220> FEATURE:
 27 <223> OTHER INFORMATION: based on mammalian sequence
 29 <400> SEQUENCE: 1
 30 agtccgtggt agggcaggtt ggggtgact 29
 33 <210> SEQ ID NO: 2
 34 <211> LENGTH: 15
 35 <212> TYPE: DNA
 36 <213> ORGANISM: Artificial
 38 <220> FEATURE:
 39 <223> OTHER INFORMATION: based on mammalian sequence
 41 <400> SEQUENCE: 2
 42 ggttggtgtg gttgg 15
 45 <210> SEQ ID NO: 3
 46 <211> LENGTH: 29
 47 <212> TYPE: DNA
 48 <213> ORGANISM: Artificial
 50 <220> FEATURE:
 51 <223> OTHER INFORMATION: based on mammalian sequence
 53 <400> SEQUENCE: 3
 54 agtccgtggt agggcaggtt ggggtgact 29
 57 <210> SEQ ID NO: 4
 58 <211> LENGTH: 15
 59 <212> TYPE: DNA
 60 <213> ORGANISM: Artificial
 62 <220> FEATURE:
 63 <223> OTHER INFORMATION: based on mammalian sequence

(Pg. 6)

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```

65 <400> SEQUENCE: 4
66 gggttggtgtg gttgg                                     15
69 <210> SEQ ID NO: 5
70 <211> LENGTH: 49
71 <212> TYPE: DNA
72 <213> ORGANISM: Artificial
74 <220> FEATURE:
75 <223> OTHER INFORMATION: based on mammalian sequence
78 <220> FEATURE:
79 <221> NAME/KEY: misc_feature
80 <222> LOCATION: (30)..(34)
81 <223> OTHER INFORMATION: n is a, c, g, t, or u
83 <400> SEQUENCE: 5
W--> 84 agtccgtggt agggcagggtt ggggtgactn nnnngggttg tgtggttg      49
87 <210> SEQ ID NO: 6
88 <211> LENGTH: 54
89 <212> TYPE: DNA
90 <213> ORGANISM: Artificial
92 <220> FEATURE:
93 <223> OTHER INFORMATION: based on mammalian sequence
96 <220> FEATURE:
97 <221> NAME/KEY: misc_feature
98 <222> LOCATION: (30)..(39)
99 <223> OTHER INFORMATION: n is a, c, g, t, or u
101 <400> SEQUENCE: 6
W--> 102 agtccgtggt agggcagggtt ggggtgactn nnnnnnnng gttggtgtgg ttgg    54
105 <210> SEQ ID NO: 7
106 <211> LENGTH: 54
107 <212> TYPE: DNA
108 <213> ORGANISM: Artificial
110 <220> FEATURE:
111 <223> OTHER INFORMATION: based on mammalian sequence
114 <220> FEATURE:
115 <221> NAME/KEY: misc_feature
116 <222> LOCATION: (16)..(25)
117 <223> OTHER INFORMATION: n is a, c, g, t, or u
119 <400> SEQUENCE: 7
W--> 120 gggttggtgtg gttggnnnnn nnnnnagtcc gtggtagggc aggttgggggt gact    54
123 <210> SEQ ID NO: 8
124 <211> LENGTH: 40
125 <212> TYPE: DNA
126 <213> ORGANISM: Artificial
128 <220> FEATURE:
129 <223> OTHER INFORMATION: based on mammalian sequence
131 <400> SEQUENCE: 8
132 gggttggtgtg gttggttttt ttctgtcggt agtgaagggt      40
135 <210> SEQ ID NO: 9
136 <211> LENGTH: 54
137 <212> TYPE: DNA

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138 <213> ORGANISM: Artificial
140 <220> FEATURE:
141 <223> OTHER INFORMATION: based on mammalian sequence
143 <400> SEQUENCE: 9
144 aaccttcact aacgacagtt ttttttagtcc gtggtagggc aggttgggggt gact          54
147 <210> SEQ ID NO: 10
148 <211> LENGTH: 50
149 <212> TYPE: DNA
150 <213> ORGANISM: Artificial
152 <220> FEATURE:
153 <223> OTHER INFORMATION: based on mammalian sequence
155 <400> SEQUENCE: 10
156 ggttggtgtg gttggttttt tttttttttt ttctgtcggt agtgaagggt          50
159 <210> SEQ ID NO: 11
160 <211> LENGTH: 64
161 <212> TYPE: DNA
162 <213> ORGANISM: Artificial
164 <220> FEATURE:
165 <223> OTHER INFORMATION: based on mammalian sequence
167 <400> SEQUENCE: 11
168 aaccttcact aacgacagtt tttttttttt ttttttagtcc gtggtagggc aggttgggggt          60
170 gact          64
173 <210> SEQ ID NO: 12
174 <211> LENGTH: 60
175 <212> TYPE: DNA
176 <213> ORGANISM: Artificial
178 <220> FEATURE:
179 <223> OTHER INFORMATION: based on mammalian sequence
181 <400> SEQUENCE: 12
182 ggttggtgtg gttggttttt tttttttttt tttttttttt ttctgtcggt agtgaagggt          60
185 <210> SEQ ID NO: 13
186 <211> LENGTH: 74
187 <212> TYPE: DNA
188 <213> ORGANISM: Artificial
190 <220> FEATURE:
191 <223> OTHER INFORMATION: based on mammalian sequence
193 <400> SEQUENCE: 13
194 aaccttcact aacgacagtt tttttttttt tttttttttt ttttttagtcc gtggtagggc          60
196 aggttgggggt gact          74
199 <210> SEQ ID NO: 14
200 <211> LENGTH: 39
201 <212> TYPE: DNA
202 <213> ORGANISM: Artificial
204 <220> FEATURE:
205 <223> OTHER INFORMATION: based on mammalian sequence
207 <400> SEQUENCE: 14
208 ggttggtgtg gttggttttt tttttttttt ttcgcatct          39
211 <210> SEQ ID NO: 15
212 <211> LENGTH: 53

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```

213 <212> TYPE: DNA
214 <213> ORGANISM: Artificial
216 <220> FEATURE:
217 <223> OTHER INFORMATION: based on mammalian sequence
219 <400> SEQUENCE: 15
220 agatgcggttt tttttttttt ttttagtccg tggtagggca gggtgggggtg act      53
223 <210> SEQ ID NO: 16
224 <211> LENGTH: 27
225 <212> TYPE: DNA
226 <213> ORGANISM: Artificial
228 <220> FEATURE:
229 <223> OTHER INFORMATION: based on mammalian sequence
232 <220> FEATURE:
233 <221> NAME/KEY: misc_feature
234 <222> LOCATION: (16)..(20)
235 <223> OTHER INFORMATION: n is a, c, g, t, or u
237 <400> SEQUENCE: 16
W--> 238 gggttggtgtg gttggnnnnn cgcattct      27
241 <210> SEQ ID NO: 17
242 <211> LENGTH: 41
243 <212> TYPE: DNA
244 <213> ORGANISM: Artificial
246 <220> FEATURE:
247 <223> OTHER INFORMATION: based on mammalian sequence
250 <220> FEATURE:
251 <221> NAME/KEY: misc_feature
252 <222> LOCATION: (8)..(12)
253 <223> OTHER INFORMATION: n is a, c, g, t, or u
255 <400> SEQUENCE: 17
W--> 256 agatgcggnnn nnagtcctgt gtagggcagg ttgggggtgac t      41
259 <210> SEQ ID NO: 18
260 <211> LENGTH: 28
261 <212> TYPE: DNA
262 <213> ORGANISM: Artificial
264 <220> FEATURE:
265 <223> OTHER INFORMATION: based on mammalian sequence
268 <220> FEATURE:
269 <221> NAME/KEY: misc_feature
270 <222> LOCATION: (16)..(20)
271 <223> OTHER INFORMATION: n is a, c, g, t, or u
273 <400> SEQUENCE: 18
W--> 274 gggttggtgtg gttggnnnnn tcgcattct      28
277 <210> SEQ ID NO: 19
278 <211> LENGTH: 41
279 <212> TYPE: DNA
280 <213> ORGANISM: Artificial
282 <220> FEATURE:
283 <223> OTHER INFORMATION: based on mammalian sequence
286 <220> FEATURE:

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```

287 <221> NAME/KEY: misc_feature
288 <222> LOCATION: (8)..(12)
289 <223> OTHER INFORMATION: n is a, c, g, t, or u
291 <400> SEQUENCE: 19
W--> 292 agatgcgnnn nnagtcctgtg gtagggcagg ttggggtgac t 41
295 <210> SEQ ID NO: 20
296 <211> LENGTH: 69
297 <212> TYPE: DNA
298 <213> ORGANISM: Artificial
300 <220> FEATURE:
301 <223> OTHER INFORMATION: based on mammalian sequence
304 <220> FEATURE:
305 <221> NAME/KEY: misc_feature
306 <222> LOCATION: (19)..(51)
307 <223> OTHER INFORMATION: n is a, c, g, t, or u
309 <400> SEQUENCE: 20
W--> 310 ctgtcgttag tgaaggttnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn naacgccata 60
312 tcacagacg 69
315 <210> SEQ ID NO: 21
316 <211> LENGTH: 18
317 <212> TYPE: DNA
318 <213> ORGANISM: Artificial
320 <220> FEATURE:
321 <223> OTHER INFORMATION: based on mammalian sequence
323 <400> SEQUENCE: 21
324 ctgtcgttag tgaaggtt 18
327 <210> SEQ ID NO: 22
328 <211> LENGTH: 18
329 <212> TYPE: DNA
330 <213> ORGANISM: Artificial
332 <220> FEATURE:
333 <223> OTHER INFORMATION: based on mammalian sequence
335 <400> SEQUENCE: 22
336 cgtctgtgat atggcggt 18
339 <210> SEQ ID NO: 23
340 <211> LENGTH: 22
341 <212> TYPE: DNA
342 <213> ORGANISM: Artificial
344 <220> FEATURE:
345 <223> OTHER INFORMATION: based on mammalian sequence
348 <220> FEATURE:
349 <221> NAME/KEY: misc_feature
350 <222> LOCATION: (16)..(17)
351 <223> OTHER INFORMATION: n is a, c, g, t, or u
353 <400> SEQUENCE: 23
W--> 354 ggttggtgtg gttggnngac ag 22
357 <210> SEQ ID NO: 24
358 <211> LENGTH: 27
359 <212> TYPE: DNA

```

RAW SEQUENCE LISTING ERROR SUMMARY
 PATENT APPLICATION: US/10/539,107

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:5; N Pos. 30,31,32,33,34 ✓
 Seq#:6; N Pos. 30,31,32,33,34,35,36,37,38,39 ✓
 Seq#:7; N Pos. 16,17,18,19,20,21,22,23,24,25 ✓
 Seq#:16; N Pos. 16,17,18,19,20 ✓
 Seq#:17; N Pos. 8,9,10,11,12 ✓
 Seq#:18; N Pos. 16,17,18,19,20 ✓
 Seq#:19; N Pos. 8,9,10,11,12 ✓
 Seq#:20; N Pos. 19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38 ✓
 Seq#:20; N Pos. 39,40,41,42,43,44,45,46,47,48,49,50,51 ✓
 Seq#:23; N Pos. 16,17 ✓
 Seq#:24; N Pos. 16,17,18,19,20
 Seq#:25; N Pos. 13,14,15,16,17
 Seq#:26; N Pos. 8,9,10,11,12
 Seq#:28; N Pos. 16,17,18,19,20
 Seq#:29; N Pos. 9,10,11,12,13,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46
 Seq#:29; N Pos. 47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63,64
 Seq#:30; N Pos. 9,10,11,12,13
 Seq#:32; N Pos. 19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38
 Seq#:32; N Pos. 39,40,41,42,43,44,45,46,47,48
 Seq#:33; N Pos. 19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38
 Seq#:33; N Pos. 39,40,41,42,43,44,45,46,47,48
 Seq#:38; N Pos. 8,9,10,11,12
 Seq#:39; N Pos. 8,9,10,11,12
 Seq#:40; N Pos. 39,40,41,42,43
 Seq#:41; N Pos. 19,20,21,22,23,24,25,26,27,28,29,30,31,32,33,34,35,36,37,38
 Seq#:41; N Pos. 39,40,41,42,43,44,45,46,47,48,49,50,51
 Seq#:56; N Pos. 5
 Seq#:66; N Pos. 27

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,
 per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23,24,25,26,27
 Seq#:28,29,30,31,32,33,34,35,36,37,38,39,40,41,42,43,44,45,46,47,48,49,50,51
 Seq#:52,53,54,55,56,57,58,59,60,61,62,63,64,65,66,67,68,69,70,71,72,73,74,75
 Seq#:76,77,78,79,80,81,82,83,84,85,86,87,88,89,90,91,92,93,94,95,96,97,98,99
 Seq#:100,101,102,103,104,105,106,107,108,109,110,111,112,113,114,115,116,117
 Seq#:118,119,120,121,122,123,124,125,126

VERIFICATION SUMMARY

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L:11 M:270 C: Current Application Number differs, Replaced Current Application No
L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:84 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:102 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
L:120 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
L:238 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:0
L:256 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:17 after pos.:0
L:274 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18 after pos.:0
L:292 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19 after pos.:0
L:310 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20 after pos.:0
L:354 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:0
L:372 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:0
L:390 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:0
L:408 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:0
L:438 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0
L:461 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:0
M:341 Repeated in SeqNo=29
L:481 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:30 after pos.:0
L:511 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:0
L:531 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:0
L:599 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:0
L:617 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:0
L:637 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:0
L:655 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:0
L:843 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:56 after pos.:0
L:969 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:66 after pos.:0